

We claim:

1. An antifogging device for use in a body safety suit having a head suit portion that covers a head of a worker, and a body suit portion which encompasses a full body of a  
5 worker below the head, and includes a face mask for attaching to a face portion of the worker, the head suit portion having a window portion in front of the facemask, the device comprising:  
a closed air space formed directly between the face mask and the window portion of the body suit, wherein the closed air space eliminates condensation from forming on  
10 the face mask of the body suit.
2. The antifogging device of claim 1, wherein the body suit is selected from one of: a hazardous material suit and a bio hazard suit.
- 15 3. The antifogging device of claim 1, wherein the body suit includes: a firefighter suit.
4. The antifogging device of claim 1, wherein the body suit includes: a space suit.
- 20 5. The antifogging device of claim 1, wherein the body suit includes: a diving suit.
6. The device of claim 1, wherein the closed air space includes:  
a flexible see-through plastic housing sealingly attached to both the face mask and to the window portion of the suit.  
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7. The device of claim 6, wherein the plastic housing includes:  
a substantially cone shape.

8. The device of claim 6, wherein the plastic housing includes:  
a first end sealingly attached to the face mask; and  
a second end that expands outward from the face mask and is sealingly attached to  
5 an interior surface of the suit adjacent to the window portion of the suit.
9. The device of claim 8, wherein the first end includes:  
an elastic-stretchable member which sealingly wraps about a portion of the face  
mask, so that the plastic housing is removably attached to the face mask.  
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10. The device of claim 9, wherein the first end includes a fastener selected from at  
least one of: hook and loop fasteners, snap fasteners, and a zipper, wherein the fastener  
sealingly attaches the plastic housing to the face mask, so that the plastic housing is  
removably attached to the face mask.  
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11. The device of claim 9, wherein the second end includes:  
permanently affixing and sealing the plastic housing to an interior surface of the  
body suit adjacent to the window portion of the body suit.
- 20 12. The device of claim 9, wherein the second end includes:  
an elastic-stretchable member which sealingly wraps about a portion of the  
interior surface of the body suit adjacent to the window portion, so that the plastic  
housing is removably attached.
- 25 13. The device of claim 9, wherein the second end includes a fastener selected from at  
least one of: hook and loop fasteners, snap fasteners, and a zipper, wherein the fastener

sealingly attaches the plastic housing to an interior portion of the body suit adjacent to the window portion, so that the plastic housing is removably attached..

14. The device of claim 1, wherein the closed air space includes:

5 a see-through plastic sheet with a substantially semi-circular configuration having a central portion with an opening which sealingly attaches to the face mask, and upper perimeter edge portions which sealingly attaches to an interior surface of the head suit portion above and below the head of the worker.

10 15. The device of claim 14, wherein the central portion of the sheet includes:

an elastic-stretchable member which sealingly wraps about a portion of the face mask, so that the plastic sheet is removably attached to the face mask.

16. The device of claim 14, wherein the central portion of the sheet includes:

15 a fastener which sealingly attaches to a portion of the face mask so that the plastic sheet is removably attached to the face mask, the fastener is selected from at least one of: hook and loop fasteners, snap fasteners, and a zipper fastener.

17. The device of claim 14, wherein the upper perimeter edge portions include:

20 a fastener selected from at least one of:  
hook and loop fasteners, snap fasteners and a zipper fastener.

18. The device of claim 1, wherein the closed air space includes:

25 a see-through plastic sheet with a substantially semi-circular configuration having a central portion with an opening which sealingly attaches to the face mask, and upper perimeter edge portions which sealingly attaches to an interior surface of the head suit portion behind the head of the worker.

19. The device of claim 1, wherein the closed air space includes:  
a see-through plastic bag which is part of the head suit portion; and  
a neck portion fastener which sealingly attaches the bag to the body suit portion.
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20. The device of claim 19, wherein the neck portion fastener includes:  
an elastic-stretchable member which sealingly wraps about an upper portion of the  
body suit portion, so that the plastic sheet is removably attached to the face mask.
- 10 21. The device of claim 19, wherein the neck portion fastener includes:  
a fastener selected from at least one of:  
hook and loop fasteners, snap fasteners and a zipper fastener.
22. The device of claim 19, further comprising:  
15 a moist air exhaust line for exhausting air from the face mask to outside the bag.
23. A method of eliminating fogging effects on a face mask worn by a person wearing  
a full body and head suit with window, comprising the steps of:  
forming a closed air space between the face mask and the window of the suit; and  
20 eliminating condensation from forming on the face mask and the window as the  
suit is being worn during an emergency condition with the closed air space.
24. The method of claim 23, wherein the step of forming includes the step of:  
forming the closed air space from cone shaped flexible see-through plastic.
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25. The method of claim 23, wherein the forming step further includes the step of:  
sealing the closed air space between the mask and the window of the suit.

26. The method of claim 25, further including the steps of:  
permanently sealing an end of the closed air space to the window on the suit.
- 5 27. The method of claim 25, further comprising the step of:  
attaching an end of the closed air space to the window with a removable fastener.
28. The method of claim 25, further comprising the step of:  
attaching an end of the closed air space to the face mask with a removable mating  
10 fastener to form an air seal therebetween.
29. The method of claim 25, further comprising the step of:  
stretching an end portion of the closed air space about a perimeter portion of the  
face mask with an elastic member to form an air seal therebetween.
- 15 30. The method of claim 23, wherein the eliminating step further includes the step of:  
eliminating the condensation from forming up to approximately 20 minutes of  
wearing the suit.
- 20 31. The method of claim 23, wherein the step of forming includes the step of:  
forming the closed air space from a flexible see-through sheet of plastic that  
extends above and below the face mask.
32. The method of claim 31, further comprising the step of:  
25 attaching central cut-out portion of the sheet to a perimeter portion of the face  
mask with a removable mating fastener to form an air seal therebetween.

33. The method of claim 31, further comprising the step of:  
stretching a central cut-out portion of the sheet about a perimeter portion of the  
face mask with an elastic member to form an air seal therebetween.
- 5 34. The method of claim 23, wherein the step of forming includes the step of:  
forming the closed air space from a flexible see-through sheet of plastic that  
extends from and behind the face mask.
35. The method of claim 34, further comprising the step of:  
10 attaching central cut-out portion of the sheet to a perimeter portion of the face  
mask with a removable mating fastener to form an air seal therebetween.
36. The method of claim 34, further comprising the step of:  
stretching a central cut-out portion of the sheet about a perimeter portion of the  
15 face mask with an elastic member to form an air seal therebetween.
37. The method of claim 23, wherein the forming step further includes the step of:  
attaching a see-through plastic bag having a neck portion with a fastener to seal  
against a neck portion of the body suit.  
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38. The method claim 37, wherein the attaching step includes the step of:  
stretching an elastic fastener member on the neck portion of the bag about an  
upper edge portion of the body suit to form a seal therebetween.
- 25 39. The method of claim 37, further comprising the step of:  
exhausting moist air from the face mask to outside the bag.